

MPT Series

Pressure Transducer



Technical data

Clogging indicators

Pressure Transducer

The T200 / T201 series is suitable for both mobile and industrial applications. Its small profile is ideal for space constraints. The body is machined from a single piece of 304SS to provide added protection for the internal electronics. A piezoresistive ceramic sensor along with ASIC signal conditioning provides an excellent thermally compensated output.

Standard Features

- Piezoresistive Ceramic Sensor
- ASIC Signal conditioning

Applications

- Industrial Equipment
- Safety Monitoring
- Mobile Equipment

Materials

Ceramic Al_2O_3
NBR (Standard) or Optional: FKM,HNBR,EPDM

Specification

Accuracy: 0.5% BFSL
Long term drift: < 0.3% FS @ 77°F (25°C)
Process connection: SS304
Vibration: 10g (20-2000Hz) for \leq 58 PSI (4 bar)
20g (20 - 500Hz) for ranges > 58 PSI (4 bar)
Shock: 50 g (11 ms)
Protection: Overvoltage, Short circuit, Reverse polarity protection
Ingress protection: IP67 (IP65 for M2 Electrical Connection)
Response Time: < 1 ms

Pressure

- Pressure range: from 0 to 7,500 psi (517 bar)
- Proof Pressure: 140% to 200% FS based on range (consult factory)
- Burst Pressure: 180% to 400% FS based on range (consult factory)

Compliance

- IEC/EN 61000-4-3(2006) 100V/m 80-1000MHz
- IEC/EN 61000-4-4(2004) Class 3
- IEC/EN 61000-4-6(2006) 3Vrms 0.15-80MHz
- ROHS

Temperatures

Thermal error:

- 7.5 psi \geq 100 psi: 0.01% FS/°F (0.018% FS/°C)
- 100 psi > 400 psi: 0.009% FS/°F (0.016% FS/°C)
- 400 psi \geq 1000 psi: 0.011% FS/°F (0.019% FS/°C)
- 1000 psi > 3000 psi: 0.012% FS/°F (0.021% FS/°C)
- 3000 psi \geq 7500 psi: 0.018% FS/°F (0.028% FS/°C)

Compensated temperatures:

- MPT200 Series: from 32°F to 185°F (from 0°C to 85°C)
- MPT201 Series: from -40°F to 257°F (from -40°C to 125°C)

Operating temperatures:

from -40°F to 257°F (from -40°C to 125°C)

Storage temperature rating:

from -40°F to 275°F (from -40°C to 135°C)

Weight

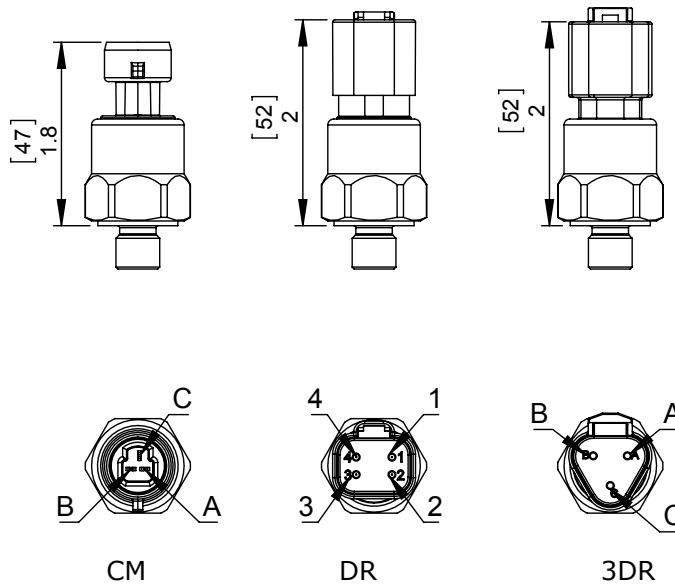
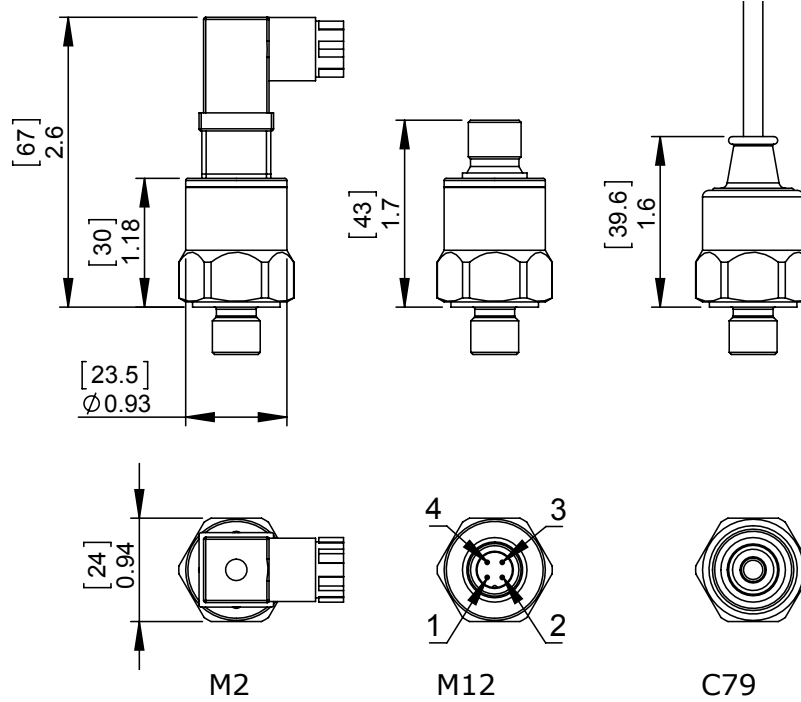
0.15 lbs (0.06 kg)

MPT		Example :	MPT200	0100P	G	3	M2	4M	N	T1	SR
Series											
MPT200	Compensated Temperat. Range 32°F to 185°F (0°C to 85°C)										
MPT201	Compensated Temperat. Range -40°F to 257°F (-40°C to 125°C)										
Pressure range											
	psi		bar								
	0015P	15 psi	001B	1 bar							
	0030P	30 psi	002B	2 bar							
	0100P	100 psi	005B	5 bar							
	0150P	150 psi	010B	10 bar							
	0300P	300 psi	020B	20 bar							
	0400P	400 psi	050B	50 bar							
	0600P	600 psi	100B	100 bar							
	1000P	1000 psi	200B	200 bar							
	1500P	1500 psi	400B	400 bar							
	3000P	3000 psi	500B	500 bar (**)							
	5000P	5000 psi									
	7500P	7500 psi (**)									
Reference											
A	Absolute										
G	Gauge										
S	Sealed										
Output											
2	4 -20 mA (2 wire)										
3	0 - 10 V (3 wire)										
4	0.5 - 4.5 V ratiometric										
5	0-5 V (3 wire)										
6	1 - 5 V (3 wire)										
7	0.5 - 4.5 V (3 wire)										
8	1 - 6V (3 wire)										
9	0.25 -10.25 V (3 wire)										
Electrical connection											
M2	DIN 43650C (Mini DIN)										
M12	M12, 4 pin										
C79	Shielded Cable 79 inches (2 meter)										
DR	Deutsch Receptacle DT04-4P										
DR3	Deutsch Receptacle DT04-3P										
CM	Packard, Metripack,150 Series (PS2)										
Process connection											
2M	1/8" NPT male										
4M	1/4" NPT male										
4G	1/4" BSPP male - G1/4										
4S	7/16" - 20 SAE male with O-ring seal										
6S	9/16" - 18 SAE male with O-ring seal										
Seals											
N	NPR (standard)										
V	Viton										
H	HNBR										
R	EPDM										
Accuracy											
T1	0.5% BFSL										
Options											
SR	Snubber										

Other material and options available upon request. Custom design available. Please consult factory.

(**) 7500 psi (500 bar) is only available with 7/16 SAE thread and 9/16 SAE thread.

Dimensions



Connector	Output				
	4 - 20 mA		Voltage		
	Supply +	Supply -	Supply +	Common	Output +
M2	1	2	1	2	3
M12	1	3	1	3	4
C79 - C158	Red	Black	Red	Black	White
DR	2	1	2	1	4
3DR	A	B	A	B	C
CM	B	A	B	A	C